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09/817,631	03/26/2001	Mark J. Koch	SMQ-028	6886

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BOSTON, MA 02109

EXAMINER

DINH, MINH

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,631

Applicant(s)

KOCH, MARK J.

Examiner

Minh Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-18 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 19-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/26/2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 12/22/2004. Claims 1, 11, 15, 19 and 21-23 have been amended.

Response to Arguments

2. Applicant's arguments filed 12/22/2004, with respect to the rejection(s) of claims: 11-12, 23, 26 and 28-29 under 35 USC 102(e) and 1-10, 13-14, 19-22, 24-25 and 27 under 35 USC 103, have been fully considered but they are not persuasive.

Regarding the rejection of claims 11-12, 23, 26 and 28-29, applicant argues that the smart card disclosed in the Spies reference does not contain a software license (p. 9, 2nd par). It is well known in the art of software protection that a software license indicating legal permission to use a content can be of different forms one of which is simply a decryption key granted by the content provider allowing a user to access and use the content. Spies discloses that the smart card contains decryption capabilities unique to a content, the decryption capabilities include a program key for accessing the content and a policy statement detailing the conditions for using the content such as the number of times or a period of time the content can be used (col. 2, lines 54-61; col. 9, line 33-39). The decryption capabilities, therefore, constitute a software license.

Regarding the rejection of claim 1, applicant argues that a code is not a cipher and that Wiedemer does not disclose the step of extracting a cipher from said digital media content, combining said cipher with a second cipher produced by said electronic

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device and sending the combined cipher to the smart card (p. 11, 1st par). Wiedemer discloses that a portion of the broadcast code is used to generate an address locator. Specifically, Wiedemer discloses that the portion of the extracted broadcast code is multiplied with a code provided by the device to generate an external code address and the external code address is sent to the removable memory card. Encipherment can be done in different ways to transform data, and a broad and reasonable interpretation of encipherment includes multiplication or mathematical manipulation. Therefore, the Wiedemer codes are ciphers. Regarding applicant's argument that the system of Spies is focused on performing at least part of the decryption on the IC card and therefore it is not obvious to combine the reference. Spies discloses that the IC card generates and send the decryption key to the user's device which performs the decryption (col. 10, lines 35-56).

In response to applicant's argument regarding the rejection of claims 5-6 that it is not obvious to use the bookmark of DAV in the system of Spies, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

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3. Applicant's arguments, see the last paragraph of page 13, filed 12/22/2004, with respect to the rejections of claim 15 under 35 USC 103 have been fully considered and are persuasive. The rejection of claim 15 has been withdrawn.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 11-12, 23, 26 and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Spies et al. (6,055,314).

Regarding claims 11-12, 23 and 28-29, Spies discloses a method for delivering digital media content, said method for use with a network, said network interfaced with a storage medium containing digital media content and further interfaced with an electronic device, said electronic device interfaced with a smart card, said method comprising the steps of: sending a request for said digital media content over said network from said electronic device (fig. 10, step 310); receiving a stream of said digital media content in encrypted form from said medium with said electronic device, said encrypted digital media content being stored on said electronic device (fig. 11, step

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322); extracting a cipher from said digital media content and sending said cipher to said smart card (fig. 12, steps 332-334); obtaining a decryption key for said cipher, said decryption key being transmitted from said smart card to said electronic device (fig. 12, steps 332-334); using said decryption key and a decryption algorithm located on said electronic device to decrypt said digital media content stored on said electronic device (fig. 12, step 336); and presenting said digital media content to said user (fig. 12, step 340). Spies further discloses that the smart card contains decryption capabilities unique to the content. The decryption capabilities specify a user's right regarding the content (col. 2, lines 54-61; col. 9, line 33-39) and, therefore, constitute a software license.

Regarding claim 26, Spies further discloses that said digital media content has both audio and visual components (see Abstract).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedemer (4,908,834) in view of Spies.

Regarding claim 1, Wiedemer discloses a method for delivering digital media content, said method for use with a network, said network interfaced with a storage

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medium containing digital media content and further interfaced with an electronic device, said electronic device interfaced with a removable memory card, said method comprising the steps of: receiving a stream of said digital media content in encrypted form from said medium with said electronic device, said encrypted digital media content being stored on said electronic device (fig. 3, step 52); extracting a code from said digital media content, said code being combined with a second code produced by said electronic device and sending the combined code to said removable memory module (fig. 3, steps 60-62); obtaining a decryption key for said combined code, said decryption key being transmitted from removable memory module to said electronic device (fig. 3, step 64); and using said decryption key and an embedded key located on said electronic device to decrypt said digital media content stored on said electronic device (fig. 3, steps 70-80). Encipherment can be done in different ways to transform data, and a broad and reasonable interpretation of encipherment includes multiplication or mathematical manipulation. Therefore, the Wiedemer codes are ciphers.

Wiedemer does not disclose sending a request for said digital media content over said network from said electronic device and using a smart card equipped with a license for said digital media content. Spies discloses a method for delivering digital media content, which includes the step of sending a request for digital media content over a network from an electronic device (fig. 10, step 310) and uses a smart card equipped with decryption capabilities which constitute a software license for said digital media content (fig. 3, element 54; col. 2, lines 54-61; col. 9, line 33-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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modify the Wiedemer method to include the step of sending a request for said digital media content over said network from said electronic device and use a smart card equipped with a software license for said digital media content, as taught by Spies. The request provides the cable company with payment instructions defining how the subscriber desires to pay for the rental program rental (col. 15, lines 42-50). Regarding to using a smart card equipped with a license for said digital media content, because the smart card is the only trusted component, purchased decryption capabilities can be utilized without being exposed to the viewer or video computing device (col. 2, lines 35-43).

Regarding claim 2, Wiedemer further discloses presenting said digital media content to said user (fig. 2, element 15).

Regarding claims 3-4, Wiedemer does not disclose limiting said license to said digital media content so that said decryption key stops working after a pre-defined number of uses or a pre-defined period of time. Spies discloses limiting a license to a digital media content so that a decryption key stops working after a pre-defined number of uses or a pre-defined period of time (col. 8, lines 33-36; col. 9, lines 32-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wiedemer method to include the step of limiting said license to said digital media content so that said decryption key stops working after a pre-defined number of uses or a pre-defined period of time, as taught by Spies, in order to limit the conditions of decryption.

Regarding claim 9, Wiedemer further discloses that said digital media content has both audio and visual components (see Title).

8. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedemer in view of Spies as applied to claim 1 above, and further in view of Digital Audio-Visual Council ("Description of Digital Audio-Visual Functionalities"). Wiedemer and Spies do not disclose denoting as reference points on said smart card each place in said stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content. Digital Audio-Visual Council discloses denoting as reference points each place in a stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content (p. 31, see Section 8.2.5.2 Functions). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Wiedemer and Spies to include the step of denoting as reference points each place in said stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content, as taught by Digital Audio-Visual Council, in order to provide a time-out whenever a session is temporarily inactive. Accordingly, this session management function is provided by said smart card since the smart card is used to control user's right to the content.

9. Claims 7-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedemer in view of Spies as applied to claim 1 above, and further in view of

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Handelman et al. (6,298,441). Wiedemer and Spies do not disclose that said digital media content is audio, video or text. Handelman discloses a method for delivering digital media content, which can be audio, video or text (col. 13, lines 22-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Wiedemer and Spies such that said digital media content is audio, video or text, as taught by Handelman. These digital content types are distributable and storable in electronic form.

10. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spies as applied to claim 11 above, and further in view of Digital Audio-Visual Council. Spies does not disclose denoting as reference points on said smart card each place in said stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content. Digital Audio-Visual Council discloses denoting as reference points each place in a stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content (p. 31, see Section 8.2.5.2 Functions). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wiedemer method to include the step of denoting as reference points each place in said stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content, as taught by Digital Audio-Visual Council, in order to provide a time-out whenever a session is temporarily inactive. Accordingly, this session

management function is provided by said smart card since the smart card is used to control user's right to the content.

11. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Spies.

Regarding claim 19, Tsuria discloses a method for delivering digital media content, said method for use with a network, said network interfaced with a storage medium containing digital media content and further interfaced with an electronic device, said electronic device interfaced with a first smart card and a second smart card, said method comprising the steps of: receiving a stream of said digital media content in encrypted form from said storage medium with said electronic device, said encrypted digital media content being stored on said electronic device (figures 2B and 8); extracting a first cipher from said digital media content and sending said first cipher to said first smart card (col. 1, lines 43-57; col. 13, line 55 – col. 14, line 3); obtaining a first decryption key, which constitutes a software license, in response to said cipher using said first smart card, said decryption key being transmitted from said first smart card to said electronic device (col. 13, line 55 – col. 14, line 3); extracting a cipher from said digital media content and sending said cipher to said second smart card (col. 1, lines 43-57; col. 13, line 55 – col. 14, line 3); obtaining a second decryption key using said second smart card, said second decryption key being transmitted from said second smart card to said electronic device (col. 13, line 55 – col. 14, line 3); and using said first and second decryption keys and a decryption algorithm located on said electronic

device to decrypt said digital media content stored on said electronic device (col. 13, line 55 – col. 14, line 3). Tsuria does not disclose sending a request for said digital media content over said network from said electronic device. Spies discloses a method for delivering digital media content, which includes the step of sending a request for digital media content over a network from an electronic device (fig. 10, step 310). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Tsuria method to include the step of sending a request for said digital media content over said network from said electronic device and use a smart card, as taught by Spies. The request provides the cable company with payment instructions defining how the subscriber desires to pay for the rental program rental (col. 15, lines 42-50).

Regarding claim 20, Tsuria further discloses presenting said digital media content to said user (fig. 2B, element 140).

12. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuria in view of Spies as applied to claim 19 above, and further in view of Digital Audio-Visual Council. Tsuria and Spies do not disclose denoting as reference points on said smart card each place in said stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content. Digital Audio-Visual Council discloses denoting as reference points each place in a stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content (p. 31, see Section 8.2.5.2 Functions). It would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Tsuria and Spies to include the step of denoting as reference points each place in said stream of digital media content where said user or each one of a plurality of users has stopped receiving said digital media content, as taught by Digital Audio-Visual Council, in order to provide a time-out whenever a session is temporarily inactive. Accordingly, this session management function is provided by said smart card since the smart card is used to control user's right to the content.

13. Claims 24-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spies as applied to claim 23 above, and further in view of Handelman. Spies does not disclose that said digital media content is audio, video or text. Handelman discloses a method for delivering digital media content, which can be audio, video or text (col. 13, lines 22-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the medium of Spies such that said digital media content is audio, video or text, as taught by Handelman. These digital content types are distributable and storable in electronic form.

Allowable Subject Matter

14. Claims 15-18 are allowed.

15. The following is a statement of reasons for the indication of allowable subject matter. The present invention is directed to a method of accessing digital content delivered to a user over a network utilizing smart cards. More specifically, independent claim 15 identifies the uniquely distinct features: extracting a cipher from said digital media content and sending said cipher to a second smart card; generating a new cipher with the second smart card and sending said new cipher from the second smart card to a first smart card; obtaining a first decryption key in response to said new cipher using said first smart card, said decryption key being transmitted from said first smart card to said electronic device; obtaining a second decryption key using said second smart card, said second decryption key being transmitted from said second smart card to said electronic device; and using the first and second decryption keys to decrypt the digital content. The closest prior art, Tsuria et al. (6,499,103), discloses a method for accessing digital content delivered to a user over a network using two smart cards. However, Tsuria does not teach teaches generating a new cipher with the second smart card and sending said new cipher from the second smart card to a first smart card. Another prior art, Chaney (6,035,037), discloses a method for processing video signal using serially connected smart cards, but Chaney does not teach decryption of data. The prior art, taken either singly or in combination, fails to anticipate or fairly suggest the limitations of applicant's independent claim, in such a manner that a rejection under 35 U.S.C 102 or 103 would be proper. The claimed invention is therefore considered to be in condition for allowance as being novel and nonobvious over prior art.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

Minh Dinh
Examiner
Art Unit 2132

MD
4/8/05


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